



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	Examiner:
Andrew Cheng)	Patel, Ishwar (I.B.)
)	
Serial No.: 10/020,287)	Group Art Unit: 2827
)	
Filed: 12/11/2001)	Dated: Dec. 23, 2002
)	
For: HEAT DISTRIBUTOR FOR)	
ELECTRICAL CONNECTOR)	
)	

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: **Commissioner for Patents and Trademarks**, Washington D.C. 20231 on this 12-23-02

Signed: _____

Andrew Cheng

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

In response to the outstanding Office action dated September 19, 2002 in connection with the above-identified application, kindly amend the claims as follows and consider the accompanying remarks.

AMENDMENT

IN THE CLAIMS:

Kindly cancel claims 3, 4 and 9 without prejudice. Claims 1, 2 and 5-8 remain unchanged.

REMARKS

Election

During a telephone conversation between the Examiner and applicant on September 4, 2002, applicant made a provisional election whereby the invention of group I on which claims 1-8 can read was elected for further consideration. The Examiner further stated that group I included four patentably distinct species and applicant was required to elect a single disclosed species therefrom. Applicant hereby affirms that specie I of group I, on which claims 1, 2 and 5-8 can read, is elected by applicant for further consideration.

Claim rejections under 35 U.S.C. 103

Claims 1, 2 and 5-8 are rejected under 35 U.S.C. 103(a), as being unpatentable over applicant's disclosed prior art, figures 3 and 4 ("art 34"), in view of Hayashi et al. (US Patent 5,369,301). The Examiner's rejection relating thereto is respectfully traversed as follows.

Claim 1 recites, inter alia, a heat distributor adapted to be mounted on an electrical connector including a base plate having a bottom surface and a plurality of thermally conductive pins extending from the bottom surface. Claim 1 includes at least two features: one is that the bottom surface of the heat distributor is directly mounted and positioned on the housing of the connector; the other is that the pins of the heat distributor are arranged into the cells of the housing and physically engage contacts in the cells for transferring heat to the contacts and soldering material. In contrast, Hayashi et al. only discloses a heat distributor having a particular configuration. Hayashi et al. does not suggest how the distributor is mounted to an electrical connector. One having ordinary skill in the art may understand that the heat distributor can be used to

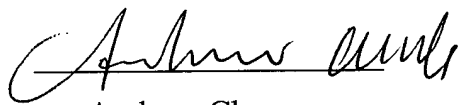
distribute heat through the connector. However, it is submitted that there is nothing in the prior art that would make it apparent to or lead one having ordinary skill in the art to devise a heat distributor having the two above-mentioned features of claim 1. The prior art, including the prior art made of record and not relied upon in the Office action, only suggest that the heat distributor can be mounted on an IC package or a fan and distribute heat thereat. There is nothing in the prior art to suggest that the heat distributor can be inserted into cells of a connector housing and used for transferring heat to the soldering material. Applicant asserts that it would not have been obvious to one having ordinary skill in the art at the time the invention was made to provide the heat distributor of claim 1. Thus, claim 1 is patentable over art 34 in view of Hayashi et al., and the rejection as to claim 1 should be withdrawn.

Claims 2, 5 and 6 are dependent on claim 1. Accordingly, it is respectfully submitted that the rejection as to claims 2, 5 and 6 should also be withdrawn.

Each of claims 7 and 8 recite an electrical system including a circuit board, an electrical connector, soldering pre-forms, and a heat distributor. The prior art in respective isolation or in combination fails to teach a heat distributor having pins which can insert into cells of an insulative housing of the connector, engage conductive members retained in the cells, and transfer heat to/from the soldering pre-forms arranged under the conductive members. Withdrawal of the rejection as to claims 7 and 8 is also respectfully requested.

In view of the foregoing, the subject application as claimed in the pending claims is in a condition for allowance and an action to such effect is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Andrew Cheng", written over a horizontal line.

Andrew Cheng

P. O. Address: 22928 Estoril Drive #5 Diamond Bar, CA 91765

Tel. No.: 909-860-8418